

HIGH SPEED ROTOR ASSEMBLY SHROUD

ABSTRACT OF THE DISCLOSURE

An improved rotor assembly shroud includes at least one reinforcing flange on the upper surface of the shroud. The strength provided by the reinforcing flange
5 allows for a smaller shroud thickness resulting in a net reduction of shroud mass. The lower shroud mass reduces the centrifugal stress on the rotor assembly blade during operation. The strength provided by the reinforcing flanges also significantly reduces the centrifugal bending stress on the shroud during operation. The shroud mass may be further reduced by tapering the shroud leading and trailing edges or, for shrouds
10 incorporating a damper, by providing a damper cavity with a lower diameter surface defining an opening therethrough.